

## General

### Title

Cardiovascular monitoring for people with cardiovascular disease and schizophrenia: percentage of members 18 to 64 years of age with schizophrenia and cardiovascular disease who had an LDL-C test during the measurement year.

### Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

## Measure Domain

### Primary Measure Domain

Clinical Quality Measures: Process

### Secondary Measure Domain

Does not apply to this measure

## Brief Abstract

### Description

This measure is used to assess the percentage of members 18 to 64 years of age with schizophrenia and cardiovascular disease who had a low-density lipoprotein cholesterol (LDL-C) test during the measurement year.

### Rationale

Patients with schizophrenia are likely to have higher levels of blood cholesterol and are more likely to receive less treatment. Patients with schizophrenia and elevated blood cholesterol levels are prescribed

statins at approximately a quarter of the rate of the general population. Furthermore, certain atypical antipsychotic drugs increase total and low-density lipoprotein (LDL) cholesterol and triglycerides, and decrease high-density lipoprotein (HDL) cholesterol, which increases the risk of coronary heart disease (Hennekens et al., 2005).

Among patients with co-occurring schizophrenia and metabolic disorders, rates of non-treatment for hyperlipidemia and hypertension were 62.4 percent for hypertension and 88.0 percent for hyperlipidemia (Nasrallah et al., 2006). Atypical antipsychotic medications elevate the risk of metabolic conditions, relative to typical antipsychotic medications (Nasrallah, 2008).

## Evidence for Rationale

Hennekens CH, Hennekens AR, Hollar D, Casey DE. Schizophrenia and increased risks of cardiovascular disease. *Am Heart J.* 2005 Dec;150(6):1115-21. [58 references] [PubMed](#)

Nasrallah HA, Meyer JM, Goff DC, McEvoy JP, Davis SM, Stroup TS, Lieberman JA. Low rates of treatment for hypertension, dyslipidemia and diabetes in schizophrenia: data from the CATIE schizophrenia trial sample at baseline. *Schizophr Res.* 2006 Sep;86(1-3):15-22. [PubMed](#)

Nasrallah HA. Atypical antipsychotic-induced metabolic side effects: insights from receptor-binding profiles. *Mol Psychiatry.* 2008 Jan;13(1):27-35. [94 references] [PubMed](#)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

## Primary Health Components

Schizophrenia; cardiovascular disease; low-density lipoprotein cholesterol (LDL-C) test

## Denominator Description

Medicaid members age 18 to 64 years as of December 31 of the measurement year with schizophrenia and cardiovascular disease (see the related "Denominator Inclusions/Exclusions" field)

## Numerator Description

A low-density lipoprotein cholesterol (LDL-C) test performed during the measurement year (see the related "Numerator Inclusions/Exclusions" field)

## Evidence Supporting the Measure

### Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Additional Information Supporting Need for the Measure

- In 2010, heart disease and diabetes were the leading causes of death in the United States (U.S.) (Murphy, Xu, & Kochanek, 2013). Because persons with serious mental illness who use antipsychotics are at increased risk of cardiovascular diseases and diabetes, screening and monitoring of these conditions is important.
- The total cost of cardiovascular disease in 2010 was estimated to be \$315.4 billion (Go et al., 2014).
- Cardiovascular disease is the greatest contributor to death in patients with schizophrenia (Capasso et al., 2008).
- Lack of appropriate care for diabetes and cardiovascular disease for people with schizophrenia or bipolar disorder who use antipsychotic medications can lead to worsening health and death. Addressing these physical health needs is an important way to improve health and economic outcomes downstream.

## Evidence for Additional Information Supporting Need for the Measure

Capasso RM, Lineberry TW, Bostwick JM, Decker PA, St Sauver J. Mortality in schizophrenia and schizoaffective disorder: an Olmsted County, Minnesota cohort: 1950-2005. *Schizophr Res*. 2008 Jan;98(1-3):287-94. [PubMed](#)

Go AS, Mozaffarian D, Roger VL, Benjamin EJ, Berry JD, Blaha MJ, Dai S, Ford ES, Fox CS, Franco S, Fullerton HJ, Gillespie C, Hailpern SM, Heit JA, Howard VJ, Huffman MD, Judd SE, Kissela BM, Kittner SJ, Lackland DT, Lichtman JH, Lisabeth LD, Mackey RH, Magid DJ, Marcus GM, Marelli A, Matchar DB, McGuire DK, Mohler ER, Moy CS, Mussolino ME, Neumar RW, Nichol G, Pandey DK, Paynter NP, Reeves MJ, Sorlie PD, Stein J, Towfighi A, Turan TN, Virani SS, Wong ND, Woo D, Turner MB, American Heart Association Statistics Committee and Stroke Statistics Subcommittee. Heart disease and stroke statistics--2014 update: a report from the American Heart Association. *Circulation*. 2014 Jan 21;129(3):e28-292. [PubMed](#)

Murphy SL, Xu J, Kochanek KD. Deaths: final data for 2010. *Natl Vital Stat Rep*. 2013 May 8;61(4):1-117.

National Committee for Quality Assurance (NCQA). The state of health care quality 2015. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. 205 p.

## Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Where applicable, measures also are assessed for construct validity using the Pearson correlation test. All measures undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis.

## Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Mar 16. 1 p.

## State of Use of the Measure

## State of Use

Current routine use

## Current Use

not defined yet

# Application of the Measure in its Current Use

## Measurement Setting

Ambulatory/Office-based Care

Behavioral Health Care

Emergency Department

Hospital Inpatient

Hospital Outpatient

Managed Care Plans

## Professionals Involved in Delivery of Health Services

not defined yet

## Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

## Statement of Acceptable Minimum Sample Size

Unspecified

## Target Population Age

Age 18 to 64 years

## Target Population Gender

Either male or female

# National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

## National Quality Strategy Aim

Better Care

## National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

# Institute of Medicine (IOM) National Health Care Quality Report Categories

## IOM Care Need

Living with Illness

## IOM Domain

Effectiveness

## Data Collection for the Measure

### Case Finding Period

The measurement year and the year prior to the measurement year

### Denominator Sampling Frame

Enrollees or beneficiaries

### Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Institutionalization

Patient/Individual (Consumer) Characteristic

Therapeutic Intervention

### Denominator Time Window

not defined yet

### Denominator Inclusions/Exclusions

Inclusions

Medicaid members age 18 to 64 years as of December 31 of the measurement year with schizophrenia

and cardiovascular disease

Identify members with schizophrenia as those who met at least one of the following criteria during the measurement year:

At least one acute inpatient encounter with any diagnosis of schizophrenia. Either of the following code combinations meets criteria:

BH Stand Alone Acute Inpatient Value Set *with* Schizophrenia Value Set

BH Acute Inpatient Value Set *with* BH Acute Inpatient POS Value Set *and* Schizophrenia Value Set

At least two visits in an outpatient, intensive outpatient, partial hospitalization, emergency department (ED) or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:

BH Stand Alone Outpatient/PH/IOP Value Set *with* Schizophrenia Value Set

BH Outpatient/PH/IOP Value Set *with* BH Outpatient/PH/IOP POS Value Set *and* Schizophrenia Value Set

ED Value Set *with* Schizophrenia Value Set

BH ED Value Set *with* BH ED POS Value Set *and* Schizophrenia Value Set

BH Stand Alone Nonacute Inpatient Value Set *with* Schizophrenia Value Set

BH Nonacute Inpatient Value Set *with* BH Nonacute Inpatient POS Value Set *and* Schizophrenia Value Set

Identify members who also have cardiovascular disease. Members are identified as having cardiovascular disease in two ways: by event or by diagnosis. The organization must use both methods to identify the eligible population, but a member need only be identified by one to be included in the measure.

*Event.* Any of the following during the year prior to the measurement year meet criteria:

*Acute Myocardial Infarction (AMI).* Discharged from an inpatient setting with an AMI (AMI Value Set).

Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set)

Identify the discharge date for the stay

*Coronary Artery Bypass Graft (CABG).* Members who had CABG (CABG Value Set) in any setting

*Percutaneous Coronary Intervention (PCI).* Members who had PCI (PCI Value Set) in any setting (e.g., inpatient, outpatient, ED)

*Diagnosis.* Identify members with ischemic vascular disease (IVD) as those who meet at least either of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

At least one outpatient visit (Outpatient Value Set) with a diagnosis of IVD (IVD Value Set)

At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of IVD (IVD Value Set)

Note:

Members must have been continuously enrolled during the measurement year and the year prior to the measurement year.

*Allowable Gap:* No more than one gap in enrollment of up to 45 days during each year of continuous enrollment. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage.

Exclusions

Unspecified

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#)  to purchase HEDIS Volume 2, which includes the Value Set Directory.

## Exclusions/Exceptions

not defined yet

## Numerator Inclusions/Exclusions

### Inclusions

A low-density lipoprotein cholesterol (LDL-C) test (LDL-C Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data. The organization may use calculated or direct LDL.

### Exclusions

Unspecified

### Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the [NCQA Web site](#)  to purchase HEDIS Volume 2, which includes the Value Set Directory.

## Numerator Search Strategy

Fixed time period or point in time

## Data Source

Administrative clinical data

Laboratory data

## Type of Health State

Does not apply to this measure

## Instruments Used and/or Associated with the Measure

Unspecified

## Computation of the Measure

## Measure Specifies Disaggregation

Does not apply to this measure

## Scoring

Rate/Proportion

## Interpretation of Score

Desired value is a higher score

## Allowance for Patient or Population Factors

not defined yet

## Standard of Comparison

not defined yet

# Identifying Information

## Original Title

Cardiovascular monitoring for people with cardiovascular disease and schizophrenia (SMC).

## Measure Collection Name

HEDIS 2016: Health Plan Collection

## Measure Set Name

Effectiveness of Care

## Measure Subset Name

Behavioral Health

## Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

## Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

## Funding Source(s)

Unspecified

## Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.



## Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

## Endorser

National Quality Forum - None

## NQF Number

not defined yet

## Date of Endorsement

2014 Dec 23

## Adaptation

This measure was not adapted from another source.

## Date of Most Current Version in NQMC

2015 Oct

## Measure Maintenance

Unspecified

## Date of Next Anticipated Revision

Unspecified

## Measure Status

This is the current release of the measure.

This measure updates previous versions:

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

## Measure Availability

Source available for purchase from the [National Committee for Quality Measurement \(NCQA\) Web site](#) .

For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: [www.ncqa.org](http://www.ncqa.org) .

## Companion Documents

The following are available:

National Committee for Quality Assurance (NCQA). The state of health care quality 2015.

Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct. 205 p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical update. Washington (DC): National Committee for Quality Assurance (NCQA); 2015 Oct 1. 12 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: [www.ncqa.org](http://www.ncqa.org) .

## NQMC Status

This NQMC summary was completed by ECRI Institute on July 25, 2013.

This NQMC summary was updated by ECRI Institute on January 22, 2014, April 10, 2015, and again on January 29, 2016.

## Copyright Statement

This NQMC summary is based on the original measure, which is subject to the measure developer's copyright restrictions.

Content adapted and reproduced with permission from the National Committee for Quality Assurance (NCQA). HEDIS® is a registered trademark of NCQA. HEDIS measures and specifications were developed by and are owned and copyrighted by NCQA. HEDIS measures and specifications are not clinical guidelines and do not establish a standard of medical care. NCQA makes no representations, warranties, or endorsement about the quality of any organization or physician that uses or reports performance measures and NCQA has no liability to anyone who relies on such measures or specifications. Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. NCQA disclaims all liability for use or accuracy of any coding contained in the specifications.

Anyone desiring to use or reproduce the measure abstracts without modification for a non-commercial purpose may do so without obtaining any approval from NCQA. All commercial uses of the measure abstracts must be approved by NCQA and are subject to a license at the discretion of NCQA. To purchase copies of the full measures and specifications, which contain additional distribution and use restrictions, contact NCQA Customer Support at 888-275-7585 or visit [www.ncqa.org/publications](http://www.ncqa.org/publications) .

## Production

## Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2016: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2015. various p.

## Disclaimer

### NQMC Disclaimer

The National Quality Measures Clearinghouse (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site. Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.